ABSTRACT

A fine metal structure having its surface furnished with microprojections of high strength, high precision and large aspect ratio; and a process for producing the fine metal structure free of defects. There is provided a fine metal structure having its surface furnished with microprojections, characterized in that the microprojections have a minimum thickness or minimum diameter ranging from 10 nanometers to 10 micrometers and that the ratio between minimum thickness or minimum diameter (D) of microprojections and height of microprojections (H), H/D, is greater than 1. There is further provided a process for producing a fine metal structure, characterized by comprising providing a substrate having a fine rugged pattern on its surface, applying a molecular electroless plating catalyst to the surface, thereafter carrying out electroless plating to thereby form a metal layer having the rugged pattern filled, and detaching the metal layer from the substrate to thereby obtain a fine metal structure furnished with a surface having undergone reversal transfer of the above rugged pattern.